

**Claims**

1. A method for use in the monitoring of communications traffic, comprising the step of recording the said traffic and storing the recorded traffic in an encrypted data format such that the data can be decrypted only by means of keys that exhibit restricted availability.
2. A method as claimed in Claim 1 and arranged to employ a spare disk and/or CPU capacity within a telecommunications system.
3. A method as claimed in Claim 1 or 2 and including the step of including encrypted search conditions within the decryption keys that are made selectively available.
4. A method as claimed in Claim 1, 2 or 3, and including the step of employing separate levels of authorisation for access to the stored data.
5. A method as claimed in any one or more of Claims 1-4, and including the step of employing a decryption key that is useable only once.
6. A method as claimed in any one or more of the preceding claims, and including the step of logging all accesses to the stored data to an encrypted secure audit trail.
7. A method as claimed in any one or more of the preceding claims and including a tamper detection reference within the encrypted data.

8. A method as claimed in any one or more of the preceding claims, and including the step of monitoring all the available communications traffic.
9. A method as claimed in Claim 8 and when the step of storing the recorded traffic comprises the step of recording all of the recorded traffic.
10. A method as claimed in any one or more of the preceding claims, wherein the communications traffic to be recorded comprises traffic through a telecommunications switch, router or gateway.
11. A method as claimed in any one or more of the preceding claims, and including the step of encrypting details relating to the communications traffic and storing the said encrypted details for subsequent access.
12. A method as claimed in any one or more of the preceding claims and including the step of authorising use of the required decryption key in a restricted manner.
13. A system for use in the monitoring of communications traffic, including means for recording the said traffic and means for storing the recorded traffic as encrypted data, such that the recorded data can be decrypted only by means of keys that exhibit restricted availability.
14. A system as claimed in Claim 13 and arranged with means for executing the method steps of any one or more of Claims 2-12.

15. A method for use in the monitoring of telecommunications traffic substantially as hereinbefore described with reference to, and as illustrated in the accompanying drawing.
16. A system for use in the monitoring of telecommunications traffic substantially as hereinbefore described with reference to, and as illustrated in the accompanying drawing.